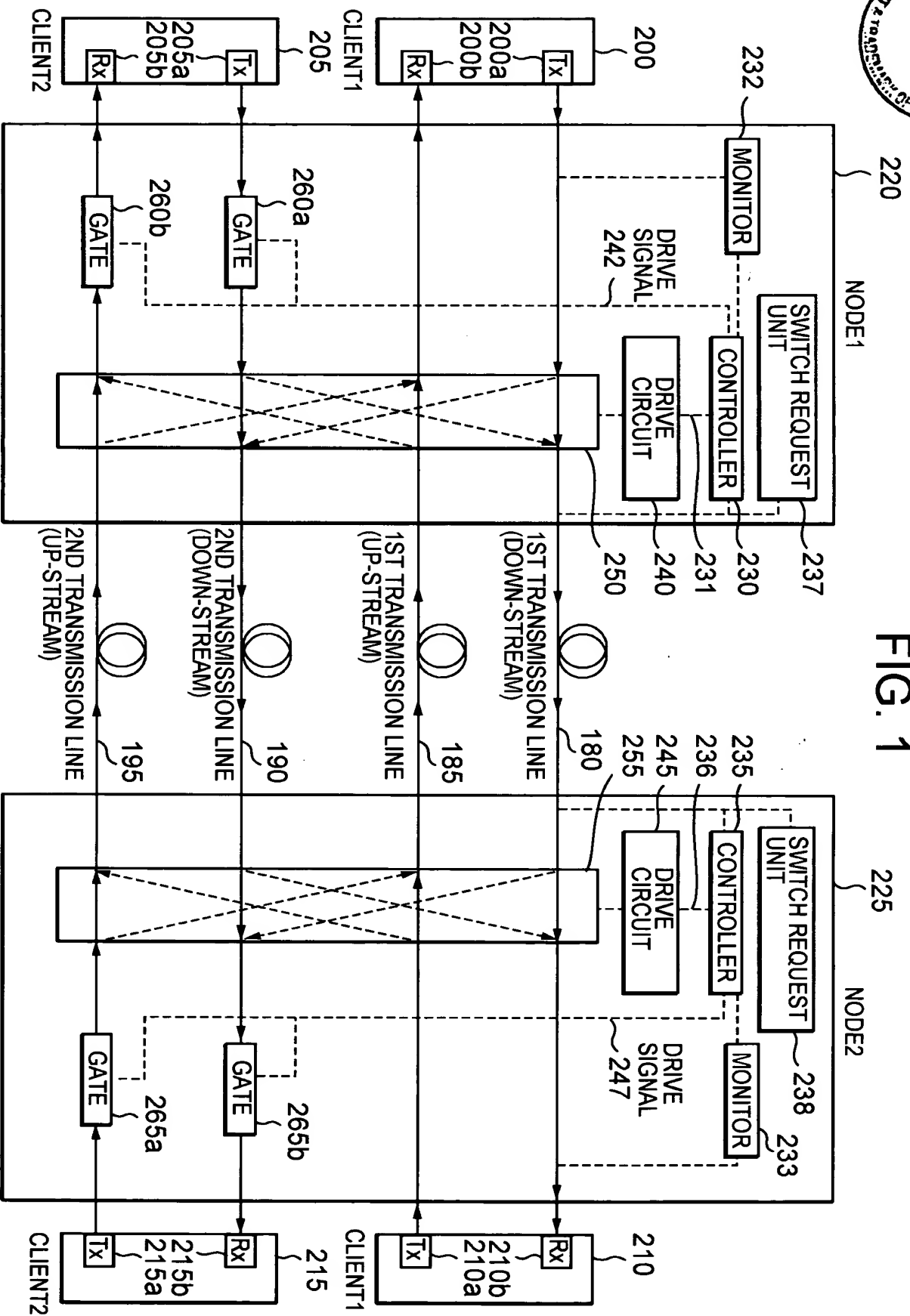




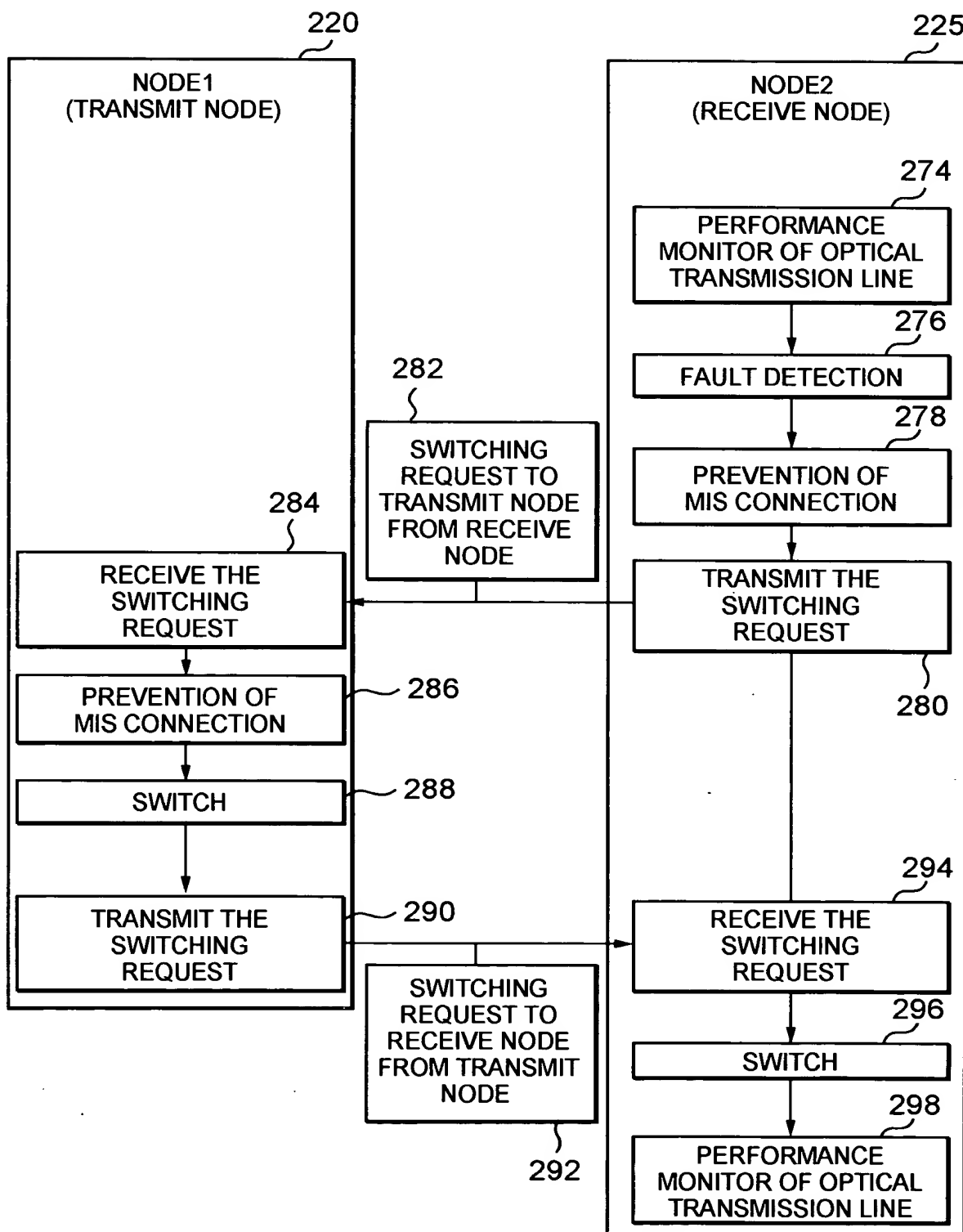
FIG. 1





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FIG. 2



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FIG. 3

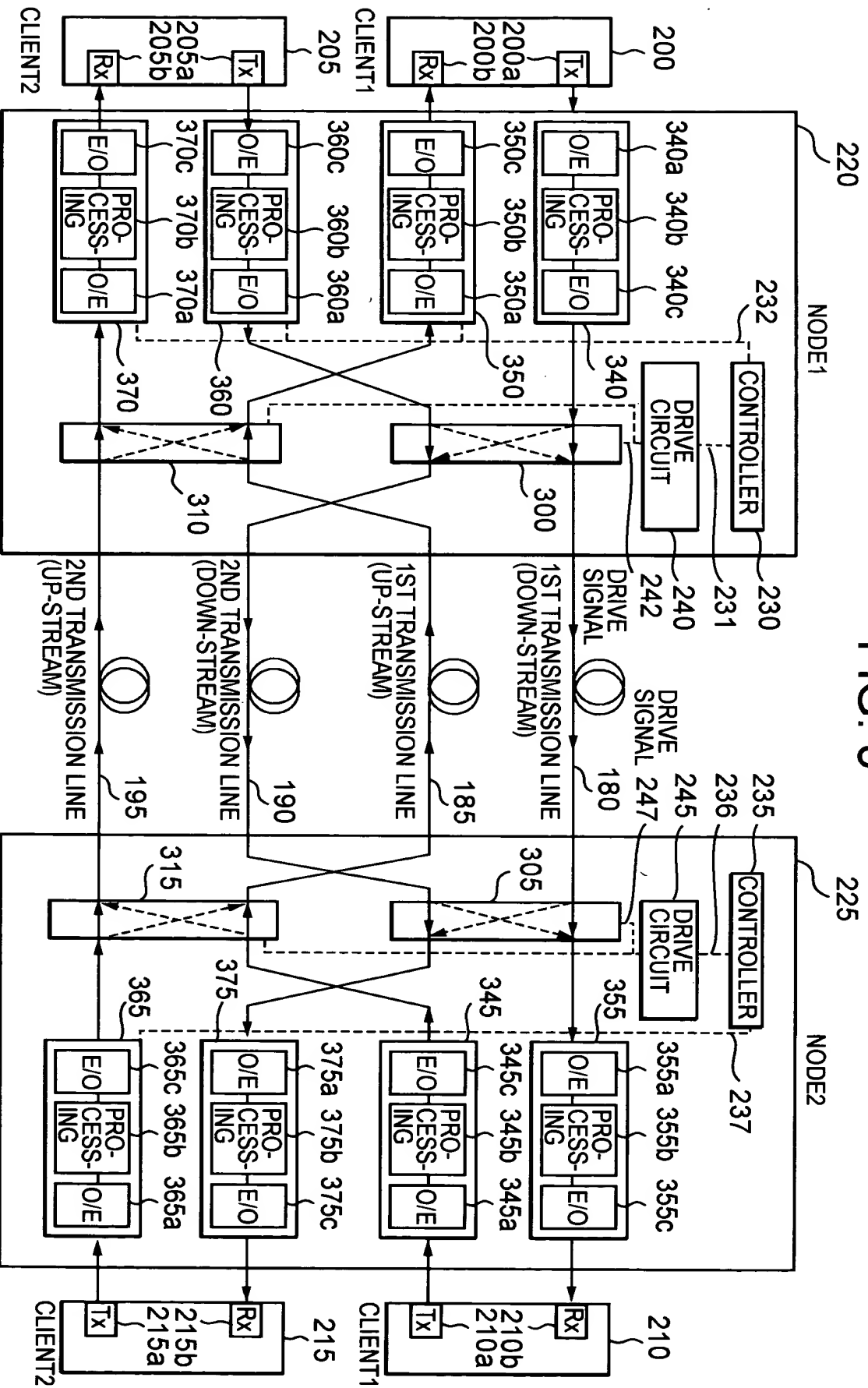
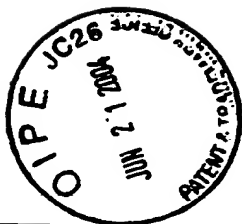




FIG. 4

	PRIORITY	TRANSMISSION LINE	CONTROL SIGNAL COMMUNICATION EQUIPMENT	
			NODE1	NODE2
SWITCHING REQUEST TO TRANSMIT NODE (NODE1) FROM RECEIVE NODE (NODE2) (282)	FIRST	2ND TRANSMISSION LINE (UP-STREAM)195	LINE OUTPUT DEVICE 370	LINE INPUT DEVICE 365
	SECOND	1ST TRANSMISSION LINE(UP-STREAM)185	LINE OUTPUT DEVICE 350	LINE INPUT DEVICE 345
SWITCHING REQUEST TO RECEIVE NODE (NODE2) FROM TRANSMIT NODE (NODE1) (292)	FIRST	2ND TRANSMISSION LINE (DOWN-STREAM)190	LINE INPUT DEVICE 340	LINE OUTPUT DEVICE 375
	SECOND	1ST TRANSMISSION LINE (DOWN-STREAM)180	LINE INPUT DEVICE 360	LINE OUTPUT DEVICE 355

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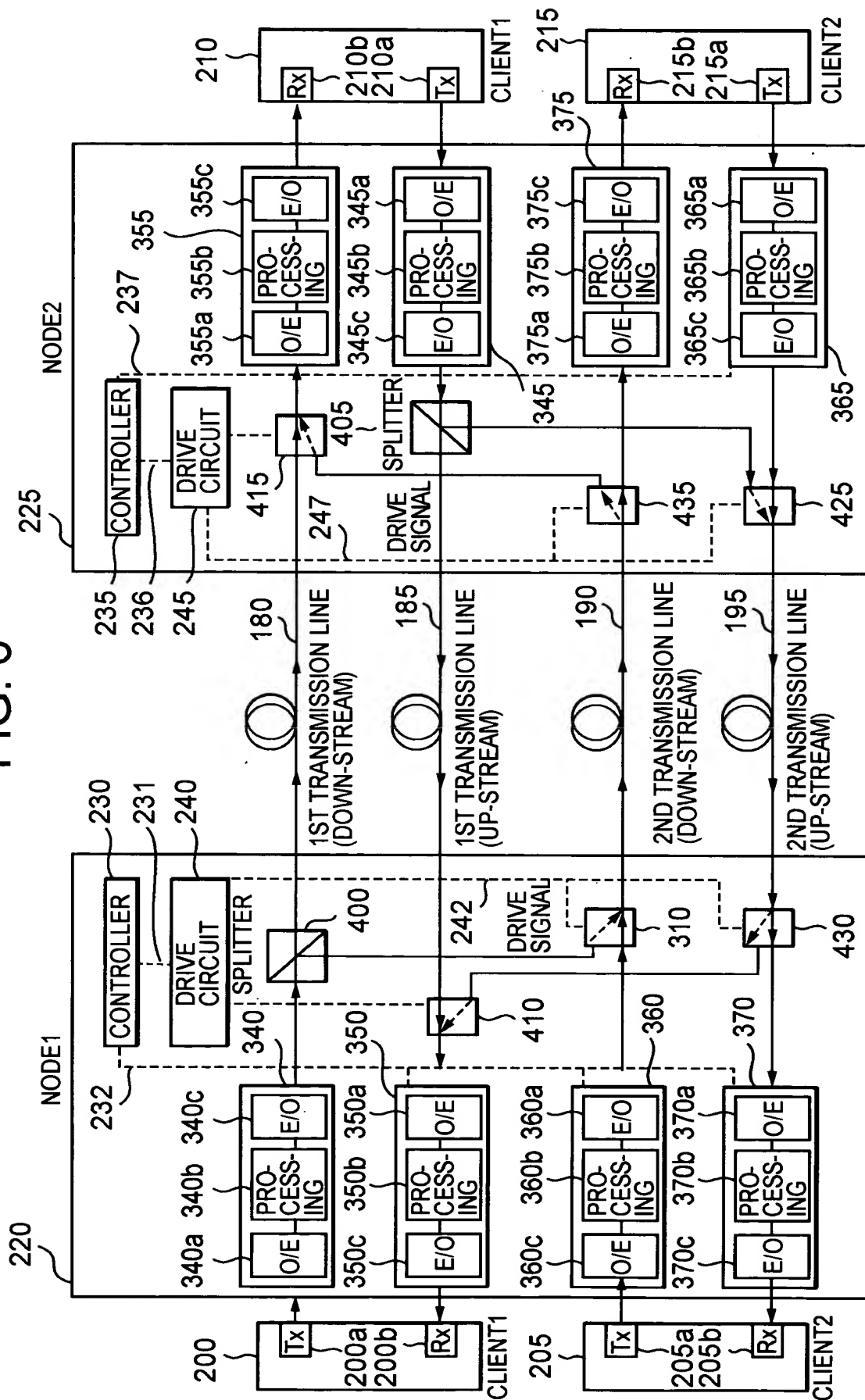


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FIG. 5

		1ST TRANSMISSION LINE(DOWN-STREAM) 180	1ST TRANSMISSION LINE(UP-STREAM) 185	2ND TRANSMISSION LINE(DOWN-STREAM) 190	2ND TRANSMISSION LINE(UP-STREAM) 195
NORMAL STATE	TRANSMITTER	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345	LINE INPUT DEVICE 360	LINE INPUT DEVICE 365
	PERFORMANCE MONITOR	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350	LINE OUTPUT DEVICE 375	LINE OUTPUT DEVICE 370
AFTER SWITCHING	TRANSMITTER	LINE INPUT DEVICE 360	LINE INPUT DEVICE 365	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345
	PERFORMANCE MONITOR	LINE OUTPUT DEVICE 375	LINE OUTPUT DEVICE 370	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350

FIG. 6



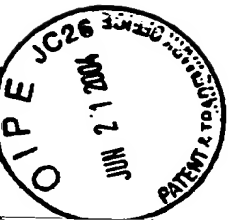


FIG. 7

	PRIORITY	TRANSMISSION NODE	CONTROL SIGNAL COMMUNICATION EQUIPMENT	
			NODE1	NODE2
SWITCHING REQUEST TO TRANSMIT NODE (NODE1) FROM RECEIVE NODE (NODE2) (282)	FIRST	2ND TRANSMISSION LINE (UP-STREAM) 195	LINE OUTPUT DEVICE 370	LINE INPUT DEVICE 365
	SECOND	1ST TRANSMISSION LINE (UP-STREAM) 185	LINE OUTPUT DEVICE 350	LINE INPUT DEVICE 345
SWITCHING REQUEST TO RECEIVE NODE (NODE2) FROM TRANSMIT NODE (NODE1) (292)	FIRST	2ND TRANSMISSION LINE (DOWN-STREAM) 190	LINE INPUT DEVICE 340	LINE OUTPUT DEVICE 375
	SECOND	1ST TRANSMISSION LINE (DOWN-STREAM) 180	LINE INPUT DEVICE 340	LINE OUTPUT DEVICE 355

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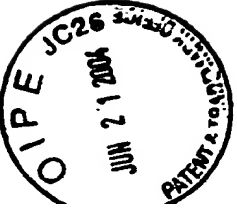
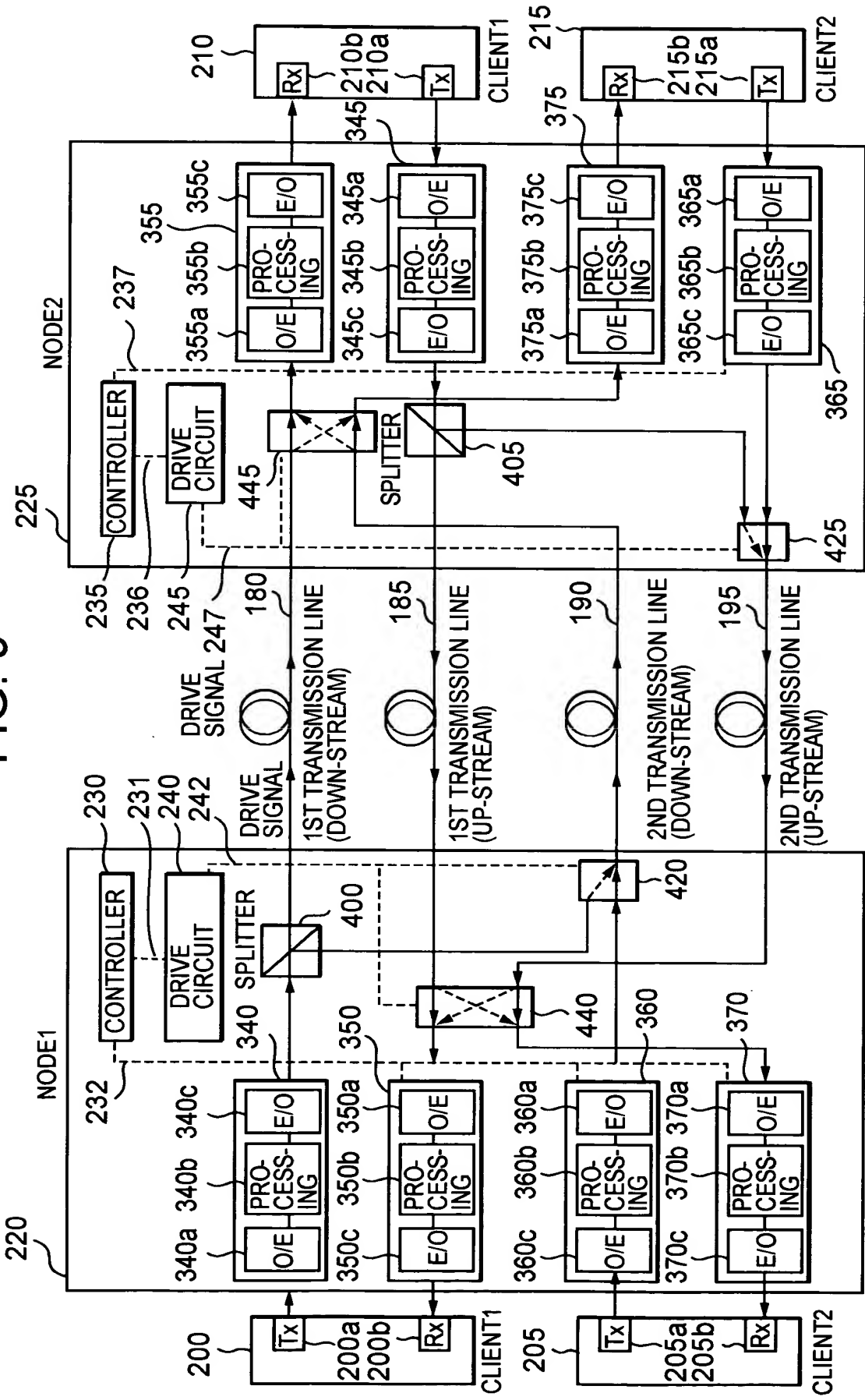
FIG. 8

		1ST TRANSMISSION LINE(DOWN-STREAM) 180	1ST TRANSMISSION LINE(UP-STREAM) 185	2ND TRANSMISSION LINE(DOWN-STREAM) 190	2ND TRANSMISSION LINE(UP-STREAM) 195
NORMAL STATE	TRANSMITTER	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345	LINE INPUT DEVICE 360	LINE INPUT DEVICE 365
	PERFORMANCE MONITOR	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350	LINE OUTPUT DEVICE 375	LINE OUTPUT DEVICE 370
AFTER SWITCHING	TRANSMITTER	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345
	PERFORMANCE MONITOR	NONE	NONE	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350



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FIG. 9



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FIG. 10

		1ST TRANSMISSION LINE(DOWN-STREAM) 180	1ST TRANSMISSION LINE(UP-STREAM) 185	2ND TRANSMISSION LINE(DOWN-STREAM) 190	2ND TRANSMISSION LINE(UP-STREAM) 195
		TRANSMITTER	TRANSMITTER	TRANSMITTER	TRANSMITTER
NORMAL STATE	PERFORMANCE MONITOR	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345	LINE INPUT DEVICE 360	LINE INPUT DEVICE 365
	PERFORMANCE MONITOR	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350	LINE OUTPUT DEVICE 375	LINE OUTPUT DEVICE 370
AFTER SWITCHING	TRANSMITTER	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345	LINE INPUT DEVICE 340	LINE INPUT DEVICE 345
	PERFORMANCE MONITOR	LINE OUTPUT DEVICE 375	LINE OUTPUT DEVICE 370	LINE OUTPUT DEVICE 355	LINE OUTPUT DEVICE 350



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FIG. 11

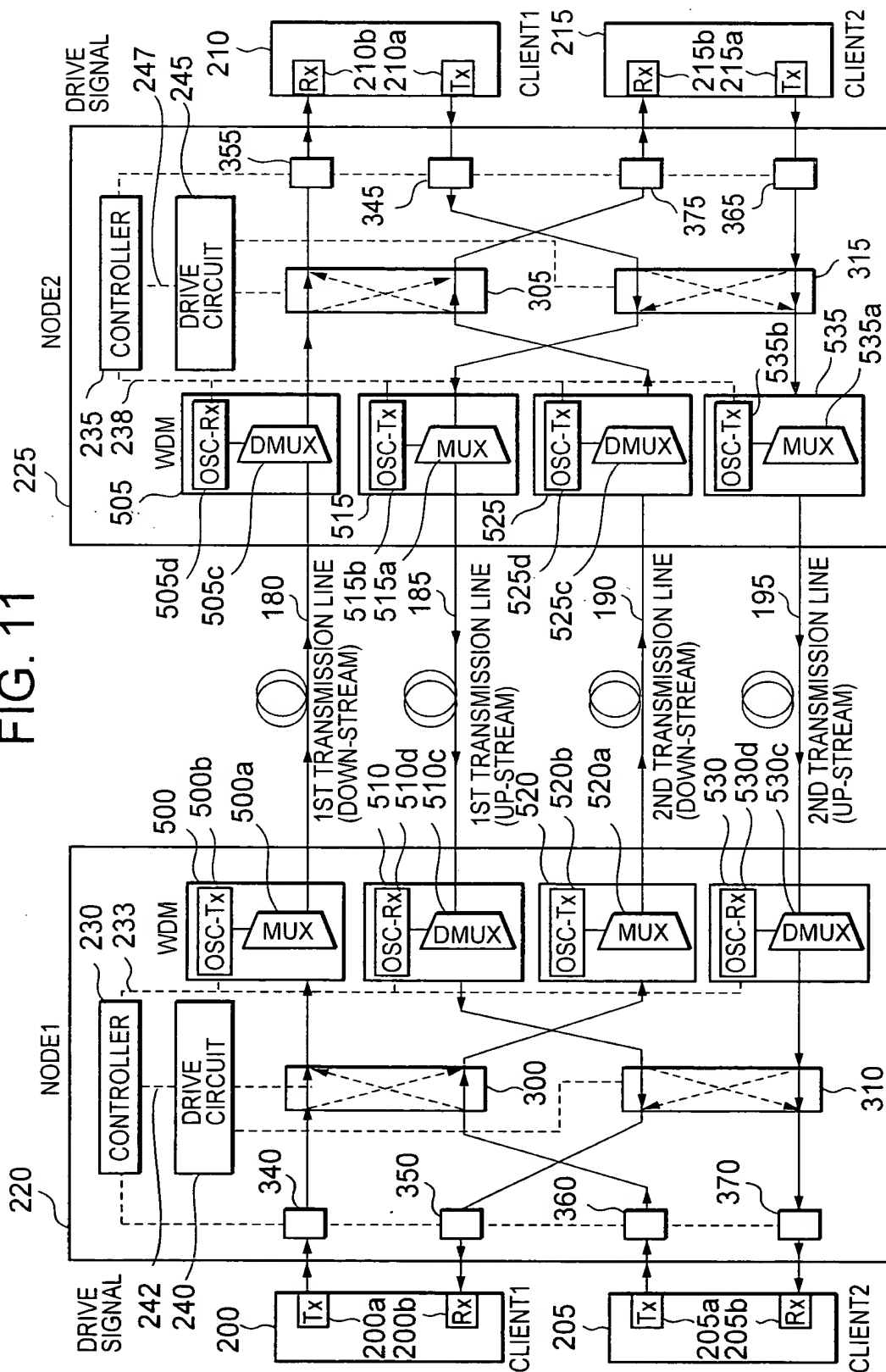


FIG. 12A
PRIOR ART

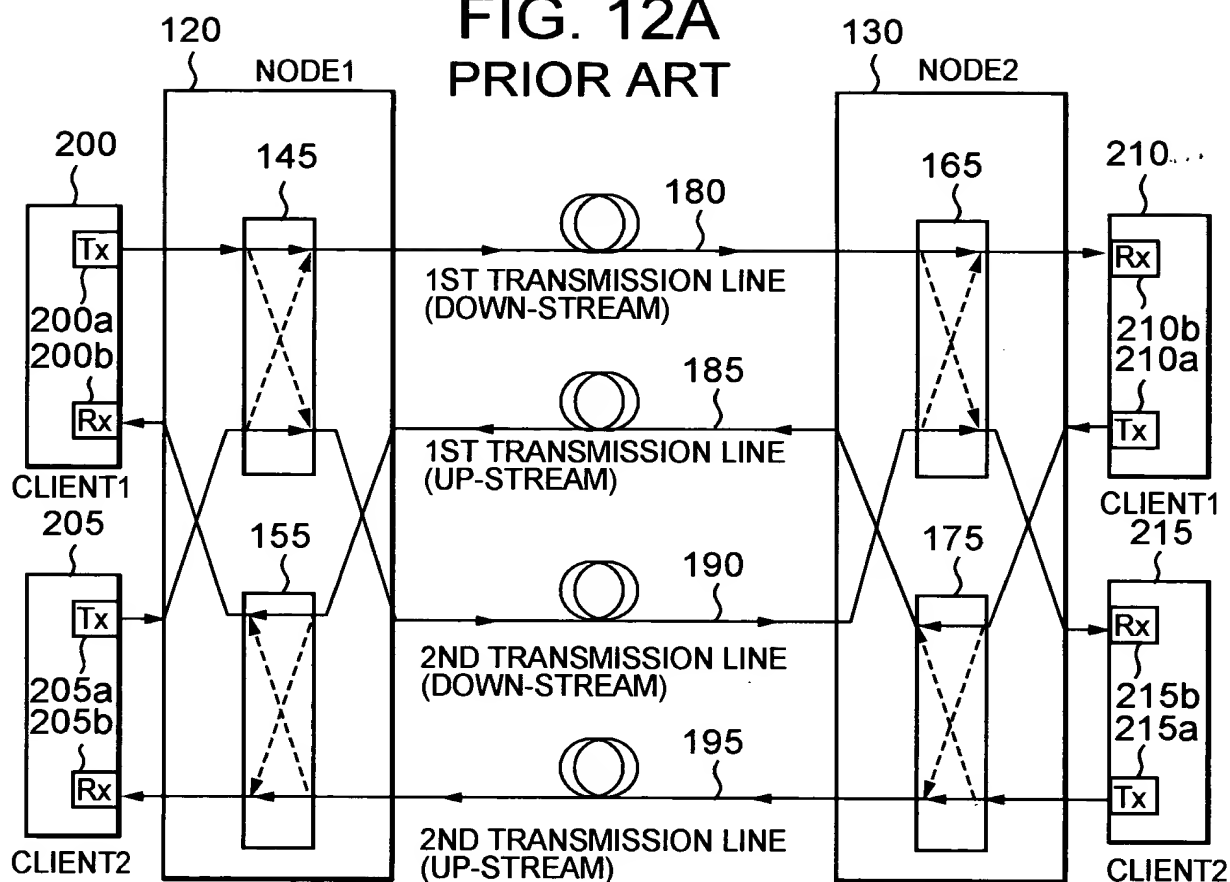
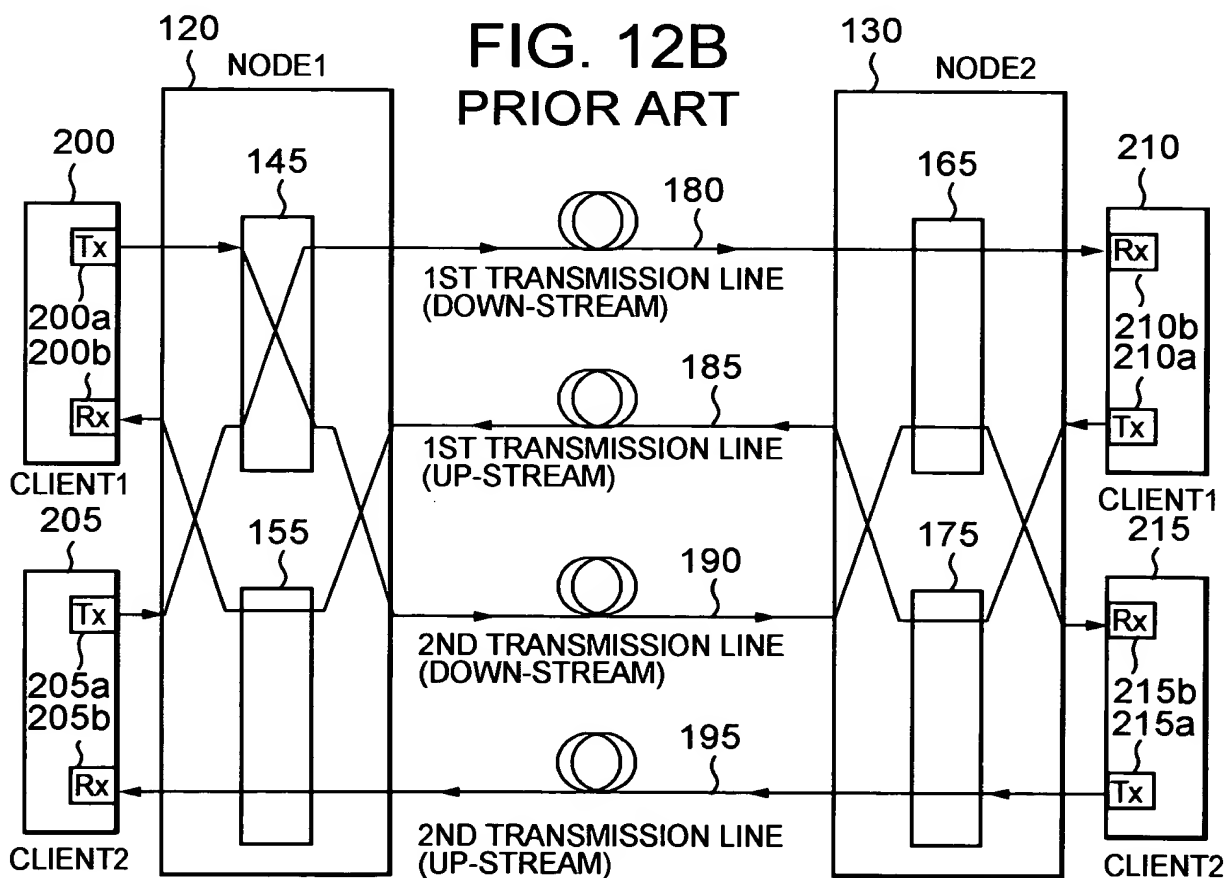


FIG. 12B
PRIOR ART





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FIG. 13 PRIOR ART

TRANSMITTER	RECEIVER		
	NORMAL	AFTER SWITCHING OF TRANSMITTING NODE	AFTER SWITCHING OF BOTH NODES
200a CLIENT1	210b	215b (MIS CONNECTION)	210b
205a CLIENT2	215b	210b (MIS CONNECTION)	215b